

Date: Sun, 24 Oct 93 04:30:30 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V93 #82
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Oct 93 Volume 93 : Issue 82

Today's Topics:

 books on micro stripline circuits (2 msgs)
 For Sale - PCB for Micro20 Receiver (2 msgs)
 How to do CW with a cb? (2 msgs)
 SSB/CW project ?
 Temp control soldering iron?

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 20 Oct 1993 21:41:36 GMT
From: korie!sh.wide!wnoc-snd-ss2!sakunami!gatortia!wapiko!jf7pbw!yumyum!
jf7wex@ames.arpa
Subject: books on micro stripline circuits
To: ham-homebrew@ucsd.edu

I had ordered the book "Stripline Circuit Design" by
Harlan Howe,Jr(1974), from Artech House. Recently,
I was informed that that book went out of print, the shop
assistant said this word came in from the publisher.
Is this true? Really can't I obtain this now??
I am doubtful of his words...because I have experiences
of buying some "out-of-print"(bookseller says) books and
confirming some in print!

I would appreciate recommendation of other related books,
alternatively.

Ryuji Suzuki JF7WEX

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>>> On Wed, 20 Oct 1993 21:41:36 GMT,
>>> jf7wex@yummyum.sdj.miyagi.prug.or.jp (Ryuji Suzuki) said:
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-> I would appreciate recommendation of other related books,
-> alternatively.

Date: 22 Oct 93 18:20:04 GMT
From: auratek!epacyna@uunet.uu.net
Subject: For Sale - PCB for Micro20 Receiver
To: ham-homebrew@ucsd.edu

Band Pass---NE602 Mix.---Cohn Xtal---MC1350---NE602 Prod.Det.---LM386 AF
Filter | Filter | | | |
VFO | BFO |
|
| AGC Amp. |

The Micro20 uses a 4 pole cohn filter using 10Hz crystals and a 4MHz VFO. It is a simple matter to change the tuned circuits and filter frequency and make this receiver for any band. For example, a filter with 16Mhz crystals and a 5Mhz VFO would tune 15M. This is basically the same receiver as used in the

Date: 23 Oct 93 14:57:27 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: How to do CW with a cb?
To: ham-homebrew@ucsd.edu

In article <al152511.751337973@academ07> al152511@academ01.mty.itesm.mx (Ricardo Rodriguez Marroquin) writes:

>

> I am looking to practice the code to get an amateur license, and would like to know if there is a way to make a cb radio to transmute in CW, or how to make it transmute with a "fake" CW, only using a key to make noise, and communicate with a partner equipped in the same manner.

>

>Our radios have extra frequencies and we live in in a rural area, so it is very few the disturbance we could cause, if any, to the neighbor cbers.

Ok, first to head off the flame war, this is almost certainly an illegal activity in your country, it certainly is in the US. In the US the only modulations allowed on Class D CB are AM and SSB voice, and operating outside the assigned channels is strictly forbidden.

That said, there *is* a legal way to do this in the US, and perhaps in your country. That is to operate a Part 15 device limited to 100 mw output in any of several bands, including the CB band. Morse via A1 or A2 emission is legal with these units. Radio Shack sells them under the "Space Patrol" label complete with Morse key and code chart. Range is typically only about 1/4 mile however.

Now, if for some reason you can legally use Morse via A1 or A2 with regular CBs in your country, the methods of keying the transmitter are relatively simple. For slow speed Morse, simply keying the push to talk line will often work. If the CB has a TR relay instead of electronic switching, operating high speed Morse this way won't work so well. There's also a possible problem with chirp depending on how the radio's transceive circuitry is designed. A better way is to key the emitter of the driver transistor, or the power control transistor if your radio has one.

Since operating A1 requires a receiver with a BFO, IE a SSB CB or a communications receiver, A2 modulation may be preferred. This is really easy. Simply make a tone generator that you can key and feed it's output to the microphone input of the radio. You can either do this electrically with a coupling capacitor or transformer, or you can couple acoustically via a speaker held to the microphone. This signal can be received on an ordinary CB of the same type, IE AM to AM or SSB to SSB.

Whatever you decide to do, *don't* go outside the assigned CB channels.

This would be a source of interference to either amateurs, government, or military communications systems that use the frequencies adjacent to the CB band. Even 4 watts can cause worldwide interference when the skip is in. You may not hear anyone using the frequency if it's a military or government channel, but rest assured that the users of those channels are listening, and won't be amused.

If your partner is within several hundred to a few thousand yards from you, there is another way that will work that's legal everywhere as far as I know. That's to use sheet resistance transmission, IE underground radio. Simply drive two stakes in the ground several feet apart and drive them with an audio amplifier. Your stereo will work if you use a speaker to line transformer. Hook the 8 ohm speaker side of the transformer to your stereo's output, and the 70.7 volt winding to the two stakes. You can either feed A2 tones or voice to the amplifier. To receive, your partner drives another pair of stakes in the ground at his location and hooks up a high gain audio preamp to them, the magnetic phono input of most stereos works great. He will then be able to hear your transmissions. He'll want a low cut filter to avoid listening to too much AC hum in the ground. I've made contacts over a mile away in a rural area using this method. In built up areas the AC hum tends to overwhelm everything else.

Gary

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Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: Sat, 23 Oct 1993 20:49:59 GMT

From: dog.ee.lbl.gov!agate!howland.reston.ans.net!vixen.cso.uiuc.edu!

moe.ksu.ksu.edu!hobbes.physics.uiowa.edu!news.uiowa.edu!icaen.uiowa.edu!

drenze@network.ucsd.edu

Subject: How to do CW with a cb?

To: ham-homebrew@ucsd.edu

But the best way to practice CW would, of course, be to get together in a face-to-face QSO and use a code-practice oscillator. You can build one for about \$5 in parts from RShack and an \$8 key and a block of wood for the base.

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IN GOD WE TRUST
All Others Pay Cash

Date: Sat, 23 Oct 1993 15:39:20 GMT
From: elroy.jpl.nasa.gov!swrinde!ringer!Alex.Engr.Trinity.Edu!ouzo@decwrl.dec.com
Subject: SSB/CW project ?
To: ham-homebrew@ucsd.edu

I have been away from the hobby for 9 years and now that some free time materialized I wish to jump in again. However, the rig prices I see are through the roof ! Sooo, I have decided to buy a receiver (still looking, maybe the FRG-100B, does anyone know how good this receiver is ?) and to homebrew the transmitter.

Here is the question: Does anyone have a project (schematic plus construction info, i.e., pcb layouts etc.) for a multiband SSB/CW exciter ? Say 0.5 watts ? How about a general coverage exciter ?

73s de KA2KEV/SV0BU

Date: Fri, 22 Oct 93 16:10:42 GMT
From: news.kpc.com!amd!netcomsv!netcom.com!netcomsv!bongo!skyld!jangus@decwrl.dec.com
Subject: Temp control soldering iron?
To: ham-homebrew@ucsd.edu

In article <2480@arrl.org> rschettge%arrl.org writes:

> As ARRL Handbook Editor, I would like to update the old
> standby soldering iron project to a newer approach.
>
> quality control. Cons: Complex, expensive. Cost must be <
> \$100 for parts (I've seen bead thermocouples for \$17, RTDs
> for \$19).

Considering what it costs now to buy a Weller TCP controlled temperature soldering station, (Under \$100 on sale) a person would have to be insane to attempt the same quality making it out of salvaged bits and pieces.

Especially if they plan on using this to work on (service) a several hundred (or thousand) dollar rig.

I realize the one of the hallmarks of the "Amateur Tradition" is to make do with spending \$0.00, but at the cost of equipment these days, (And the

skill and tool quality level required) the risks are not worth the minimal savings.

If you're really looking to save money on soldering equipment, use the gas range in the kitchen and a large chunk of tinned copper to transfer the heat from the stove to the part.

Amateur: WA6FWI@WA6FWI.#SOCA.CA.USA.NA		"It is difficult to imagine our
Internet: jangus@skyld.tele.com		universe run by a single omni-
US Mail: PO Box 4425 Carson, CA 90749		potent god. I see it more as a
Phone: 1 (310) 324-6080		badly run corporation."

End of Ham-Homebrew Digest V93 #82
